

Amendments to the Claims:

The present listing of claims replaces all prior listings of claims.

Listing of Claims

1. (Previously Amended) ~~A multicast-enabled network element~~An apparatus,
comprising:

a first logical interface ~~for receiving~~configured to receive a file from a content provider;

a second logical interface ~~for forwarding~~configured to forward said file to one or more hosts as a sequence of data packets in a file delivery transmission; and

a processor configured to perform the following:

a) receive a first request for the file from a first host;

b) define a multicast delivery group including the first host;

c) receive a second request for the file from a second host during file delivery transmission of the requested file to the first host;

d) determine whether the second host is situated within a locational area of the first host; and

e) if the second host is situated within the locational area of the first host, add the second host to the multicast delivery group, and cause the transmission of a remaining portion of the requested file to both first and second hosts after adding the second host to the multicast delivery group, for defining a group of one or more hosts, wherein a further host[s]] may be added to the group in response to the reception of a request from said further host, the group being limited to further hosts situated within a single locational area;

~~wherein said network element is configured to transmit the file to the group so that said further hosts joining the group during transmission of the data packet sequence receive the remaining data packets in said sequence.~~

2. (Currently Amended) ~~A network element~~An apparatus according to claim 1, further configured to transmit the file via a first communication network and to receive requests the second request from the ~~further second~~ host via a second communication network.

3. (Currently Amended) ~~A network element~~An apparatus according to claim 1, wherein the apparatus is further configured to transmit one or both of a request and the file is transmitted between the network element apparatus and the further second host via a cellular communications network, and the locational area is defined in terms of a cell, ~~so that and~~ the group is limited to hosts situated in a locational area covered by a single cell.

4. (Currently Amended) ~~A network element~~An apparatus according to claim 1, further configured to forward the file to the ~~further second~~ host over a wireless communication network, being the last network element situated before an air-interface in a file delivery path between the content provider and the second host.

5. (Currently Amended) ~~A network element~~An apparatus according to claim 1, further comprising a file request handler ~~for encrypting~~configured to encrypt information in headers of the data packets relating to ~~the a~~ correct order of data packets in the file delivery transmission.

6. (Currently Amended) ~~A network element~~An apparatus according to claim 1, wherein said processor is further configured to log a further configured so that, where a host has submitted a request during the file delivery transmission, the point in the file delivery transmission at which the second host joins is added to the group is logged.

7. (Currently Amended) ~~A network element~~An apparatus according to claim 1, ~~wherein said processor is further configured so that, where a host has joined the group during the file delivery transmission, the forwarding of the last packet in the data packet sequence is followed by~~ to repeat transmission of the file when a host is added to the group during a transmission of the file.

8. (Currently Amended) ~~A network element~~An apparatus according to claim 1, configured to receive a negative acknowledgement message and to treat said message as a request for the file.

9. (Currently Amended) ~~A method of file delivery over a network, the method comprising steps of:~~

- ~~receiving at a network element~~ a request for a file from a first host;
- retrieving the file from a content provider;
- defining a group comprising the first host;
- forwarding the file to the group as a sequence of data packets in a file delivery transmission; and
- adding to the group any further hosts submitting requests for the file during said file delivery transmission ~~so that~~whereby said further hosts receive ~~the~~ remaining data packets in said file delivery transmission, wherein the group is limited to further hosts with a same locational area as the first host.

10. (Original) A method according to claim 9, wherein the file is forwarded via a first communication network and the request from the first host is received via a second communication network.

11. (Currently Amended) A method according to claim 9, wherein one or both of the request and the file is transmitted between the network element and the first host via a cellular communications network and the locational area is defined in terms of a cell, ~~so that~~ and the group is limited to hosts situated in an area covered by a single cell.

12. (Previously Amended) A method according to claim 9, further comprising encrypting information in headers of the data packets relating to the correct order of data packets in the file delivery transmission.

13. (Previously Amended) A method according to claim 9, further comprising, where a further host has submitted a request during the file delivery transmission, logging the point in the file delivery transmission at which said further host joins the group.

14. (Previously Amended) A method according to claim 9, wherein, if one or more further hosts have joined the group during the file delivery transmission, the file is re-transmitted following the completion of the sequence of data packets.

15. (Canceled)

16. (Currently Amended) ~~A computer program according to claim 15, embodied on a computer readable medium~~ storing instructions to cause a network element to perform the method of claim 9.

17. (Currently Amended) A method ~~of retrieving a file by a host over a network, the method comprising steps of:~~

a host sending to a network element via a cellular telecommunication network a request to join a group;
receiving via a different communication network from said cellular telecommunication network, a start packet transmitted by the network element which configures a connection between the network element and the host;
receiving a sequence of data packets transmitted by the network element in a first file delivery transmission;
arranging the sequence of data packets in an appropriate order; and
receiving a second file delivery transmission comprising the sequence of data packets;
wherein the host retrieves ~~any~~ data packets that were dropped or missed in the first file delivery transmission by retrieving the corresponding data packets in the second file delivery transmission.

18. (Canceled)

19. (New) The method of claim 9, further comprising:
after all hosts in the group have successfully received the file, maintaining the group active for a predetermined amount of time; and
terminating the group after the predetermined amount of time if no additional host issues a request for the file.

20. (New) The apparatus of claim 1, wherein said processor is further configured to:
after all hosts in the group have successfully received the file, maintain the group active for a predetermined amount of time; and

terminate the group after the predetermined amount of time if no additional host issues a request for the file.

21. (New) The method of claim 9, wherein each host in the group is allocated an amount of bandwidth on a network on which the file delivery transmission occurs, and the method further comprises:

multiple hosts in the group sharing their allocated bandwidth to increase a data transfer rate experienced by the hosts in the group.

22. (New) The apparatus of claim 1, wherein each host in the group is allocated an amount of bandwidth on a network on which the file delivery transmission occurs, and the processor is further configured to:

share allocated bandwidth of multiple hosts in the group to increase a data transfer rate experienced by the hosts in the group.